

ILLEGIB

Approved For Release 2000/05/11 : CIA-RDP78T05439A000200090001-3

Next 1 Page(s) In Document Exempt

Approved For Release 2000/05/11 : CIA-RDP78T05439A000200090001-3

~~TOP SECRET CHASS RUFF~~

PHOTOGRAPHIC INTERPRETATION REPORT

287-1

SHUANG-CH'ENG-TZU
MISSILE CENTER
CHINA

NPIC/R-36/62

March 1962

NATIONAL PHOTOGRAPHIC INTERPRETATION CENTER

Declassification review by NIMA/DoD

~~TOP SECRET CHASS RUFF~~

TOP SECRET CHESS RUFF

NPIC/R-36/62

PREFACE

This report, prepared in response to CIA requirement DDI/SI/R-141/61 and supplemental requirements AFIC-32-61 and NSA/B23/R17-K-61, presents a photographic study of the Shuang-ch'eng-tzu Missile Center in China.

25X1D [REDACTED] from KEYHOLE Missions
25X1D [REDACTED] were used in preparing this report. The quality and small scale of this photography precluded the measurement of many buildings, determination of security fencing, or identification of missiles, missile transporters, or rail cars.

TOP SECRET CHESS RUFF

TOP SECRET CHESH RUFF

NPIC/R-36/62

TABLE OF CONTENTS

	Page
Summary	1
Introduction	3
SSM Launch Facilities	4
Launch Complex A	4
Launch Complex B	8
Launch Complex C	9
SSM Instrumentation	10
SSM Housing and Support Area	10
SAM Launch Complex	11
Launch Areas	11
SAM Instrumentation	14
SAM Housing and Support Area	14
Missile Support Facilities	14
Operational Support Area	15
SSM-SAM Assembly and Checkout Complex	16
Solid Propellant Storage Area	19
Revetted Storage and Handling Area	19
Administrative and Logistical Support Facilities	21
Main Support Base	21
Thermal Power Plant	26
Barracks Area	26
Natural-Surface Landing Strips	27
Shuang-ch'eng-tzu Area Airfield Complex	28
Conclusions	30
References	32

TOP SECRET CHESH RUFF

TOP SECRET CHESS RUFF

NPIC/R-36/62

LIST OF ILLUSTRATIONS

	Page
Figure 1. Location Map	2
Figure 2. Facilities at the Shuang-ch'eng-tzu Missile Center	5
Figure 3. Launch Complex A	7
Figure 4. Launch Complex B	8
Figure 5. Launch Complex C	9
Figure 6. SSM Housing and Support Area	11
Figure 7. SAM Launch complex	12
Figure 8. Facilities in SAM Launch Complex	13
Figure 9. Operational Support Area	15
Figure 10. Photo of SSM-SAM Assembly and Checkout Complex	16
Figure 11. SSM-SAM Assembly and Checkout Complex	17
Figure 12. Photo of Solid Propellant Storage Area, Revetted Storage and Handling Area, and Nearby Landing Strip	20
Figure 13. Solid Propellant Storage Area	21
Figure 14. Revetted Storage and Handling Area	21
Figure 15. Photo of Main Support Base	22
Figure 16. Main Support Base	23
Figure 17. Sketches of Housing-Space Utilization	24
Figure 18. Barracks Area	27
Figure 19. Shuang-ch'eng-tzu Area Airfield Complex	29

TOP SECRET CHESS RUFF

TOP SECRET CHSS RUFF

NPIC/R-36762

SUMMARY

The Shuang-ch'eng-tzu Missile Center (SCTMC) includes surface-to-surface missile (SSM) and surface-to-air missile (SAM) launch facilities, missile support facilities, and administrative and logistical support facilities.

The SSM launch facilities, located in the northern part of the center, comprise three launch complexes (oriented west) with a total of five launch sites, associated with instrumentation, and a support area. The three launch complexes (labeled A, B, and C) have a total of two completed launch pads and probably three pads under construction. Complexes A and C have associated final checkout areas, and all three complexes are served by the SSM Assembly and Checkout Area. Room for expansion is almost unlimited to the north of the SSM launch facilities.

The SAM launch facilities, in the central part of the SCTMC and oriented east, include two SA-2 launch areas (labeled A and B) an instrumentation network, and a support area. These facilities are served by the SAM Assembly and Checkout Area. (To date, only three deployed SAM sites have been identified in China -- in the Peiping area -- but no operational SAM support facility has been observed.)

The missile support facilities consist of the Operational Support Area, the SSM-SAM Assembly and Checkout Complex, the Solid Propellant Storage Area, and the Revetted Storage and Handling Area. The administrative and logistical support facilities include the Main Support Base, a thermal power plant, a barracks area, two landing strips, and the Shuang-ch'eng-tzu Area Airfield Complex.

- 1 -

TOP SECRET CHSS RUFF

NPIC/R-36/62

TOP SECRET CHESS RUFF

TOP SECRET CHESS RUFF

- 2 -



FIGURE 1. LOCATION OF SHUANG-CH'ENG-TZU MISSILE CENTER, CHINA.

TOP SECRET CHESS RUFF

NPIC/R-36/62

25X1D The layout of the facilities of the SCTMC generally resembles that at the Kapustin Yar/Vladimirovka Missile Test Center (KYMTC) as they appeared on [REDACTED]. 1/ However, no counterpart to the naval facilities at Launch Complex B at the KYMTC was identified. In addition, no short-range tactical SSM facilities, such as for the FROG (free rocket over ground) or SCUD systems, were identified, but it is

25X1D [REDACTED]
25X1D [REDACTED] None of the typical SSM training-type launch sites observed at the KYMTC [REDACTED] are present at the SCTMC. Also, Launch Complex C of the SCTMC is unique, resembling neither the others at this center nor any launch complex at the KYMTC.

INTRODUCTION

This report presents a photographic study of the Shuang-ch'eng-tzu Missile Center (SCTMC), the only Chinese Communist missile center identified to date. The center is located in northwest China at approximately 41-05N, 100-15E, along the O-Chi-na Ho (River) Basin in the Gobi Desert.

25X1D The SCTMC was initially identified on [REDACTED]
25X1D The interpretation in this report is based on a study of that photography and of the [REDACTED]

Primary access to the center is by rail and air. Rail service is provided by a branch from the Lan-chou -- Urumchi rail line. Air-travel facilities are provided by the large Shuang-ch'eng-tzu Area Airfield and two natural-surface landing strips. A rail spur terminating in the desert 45 nautical miles (nm) by rail to the southeast possibly indicates the location of other missile-related activity.

- 3 -

TOP SECRET CHESS RUFF

TOP SECRET CHESS RUFF

NPIC/R-36/62

SSM LAUNCH FACILITIES

The SSM launch facilities (Figures 2 through 6) consist of three road-served SSM launch complexes (designated A, B, and C, from south to north), rangehead instrumentation, and a housing and support area. There is no firm evidence of an expansion of the launch facilities; however, they could be expanded to the north. The launch areas of the complexes do not form a straight firing line; Launch Complex B is set to the rear of a line connecting the launch areas at Complexes A and C. The direction of fire is to the west, on an approximate azimuth of 270 degrees. The maximum firing range within the limits of China is 1,100 nm. An 1,100-nm terminal-range facility, if existing, would be located in the western extremity of the Takla Makan desert. The general areas of impact for 150-, 350-, 650-, and 1,100-nm missiles were examined. No evidence of terminal-range facilities was found. However, these areas were covered by scattered to heavy clouds.

Launch Complex A

25X1D This launch complex (Figure 3) consists of a launch area with two nearly identical road-served research and development (R & D) type launch sites and a Missile Checkout Area. Each of the two launch sites (designated 1A and 2A) has one pad and a control bunker served by a loop road. On the [REDACTED] photography the pads were clear and unoccupied, but the complex appeared completed. The complex is 3 nm by road from the SSM Housing and Support Area and 11 nm north of the SSM Assembly and Checkout Area.

The launch pads, which measure 210 by 210 feet, are 1,000 feet apart on center and oriented (downrange) on an azimuth of approximately 270 degrees. Control bunkers, probably earth mounded and measuring approximately 160 by 30 feet, are positioned on the south side of each pad. No vehicle or equipment revetments were identified near the pads. A small building, probably a security checkpoint, is located at the intersection of the loop road and the access road.

- 4 -

TOP SECRET CHESS RUFF

Approved For Release 2000/05/11 : CIA-RDP78T05439A000200090001-3

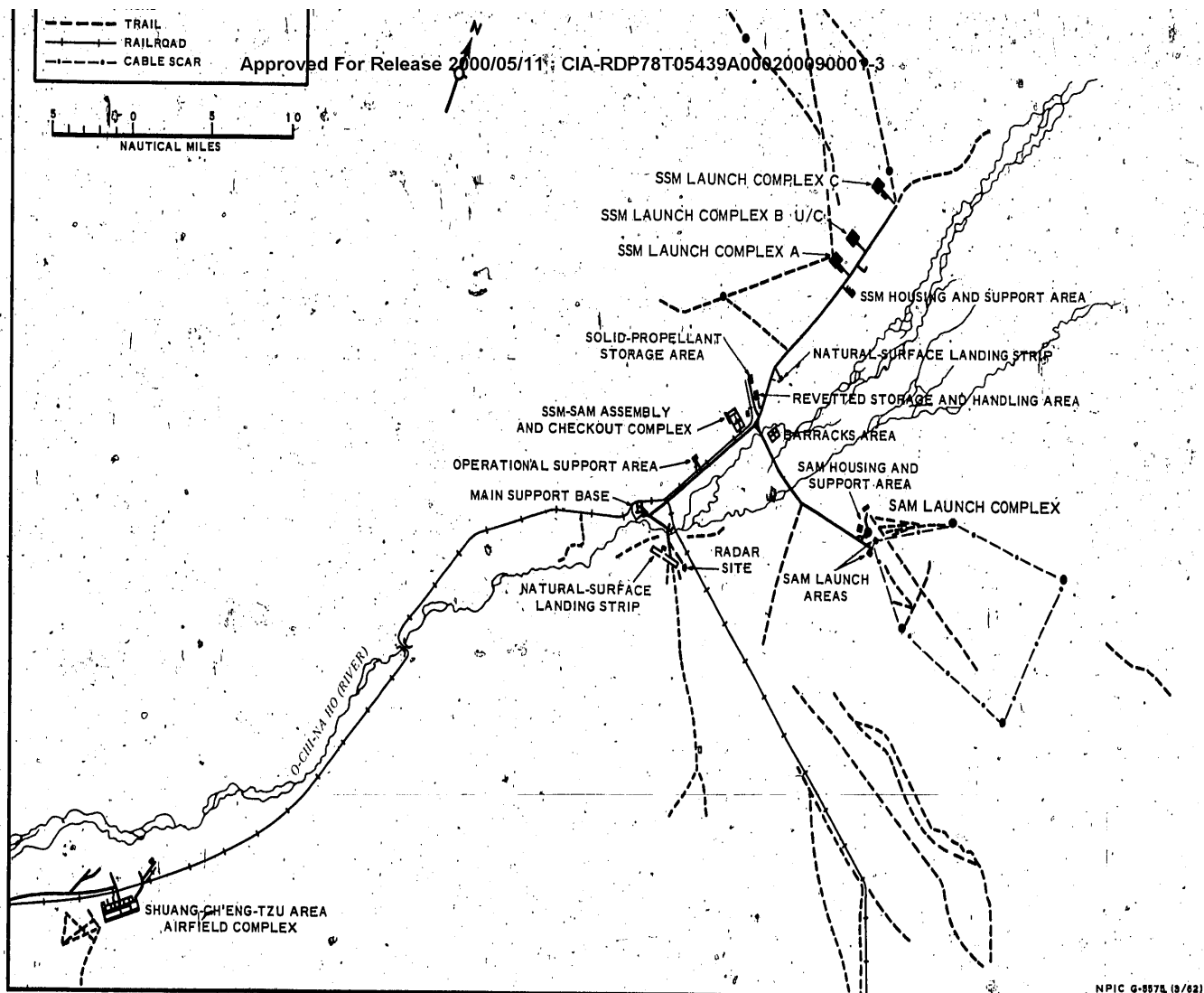


FIGURE 2. FACILITIES AT THE SHUANG-CH'ENG-TZU MISSILE CENTER.

NPIC G-8874 (8/62)

TOP SECRET CHESS RUFF

NPIC/R-36/62

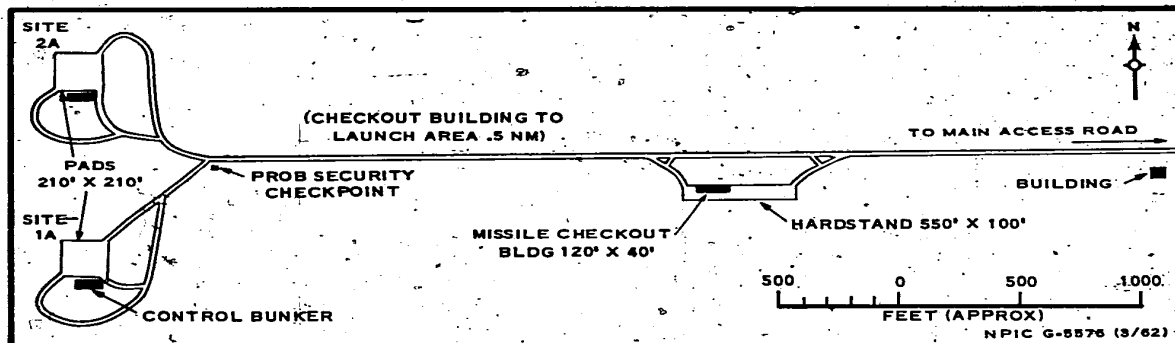
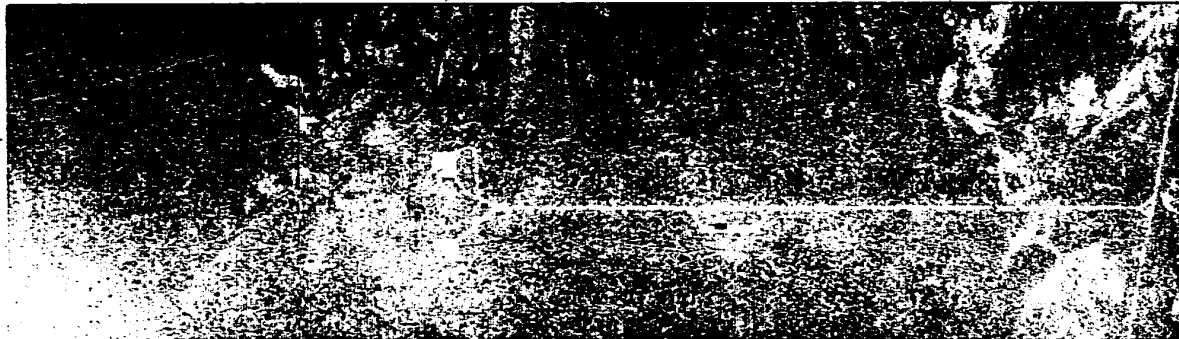


FIGURE 3. LAUNCH COMPLEX A

25X1D

The Missile Checkout Area, .5 nm east of the launch area, contains a single-story drive-through building, measuring 120 by 40 feet, positioned on a hardstand which measures 550 by 100 feet. This is the final checkout building. A building approximately 60 feet square is visible about 1,600 feet east of the checkout area.

Although this complex is not identical with any at the KYMTC, Soviet influence is obvious. The complex most nearly resembles KYMTC Launch Areas 1C and 3C and their associated final checkout areas. The small scale of the photography may preclude identification of vehicle revetments near the launch pads such as those found at the KYMTC. Missile assembly for Launch Areas 1C and 3C at the KYMTC was done entirely in the Test and Support Complex, and each launch area had its own checkout area about

TOP SECRET - CHESS - RUFF

TOP SECRET CHESS RUFF

NPIC/R-36/62

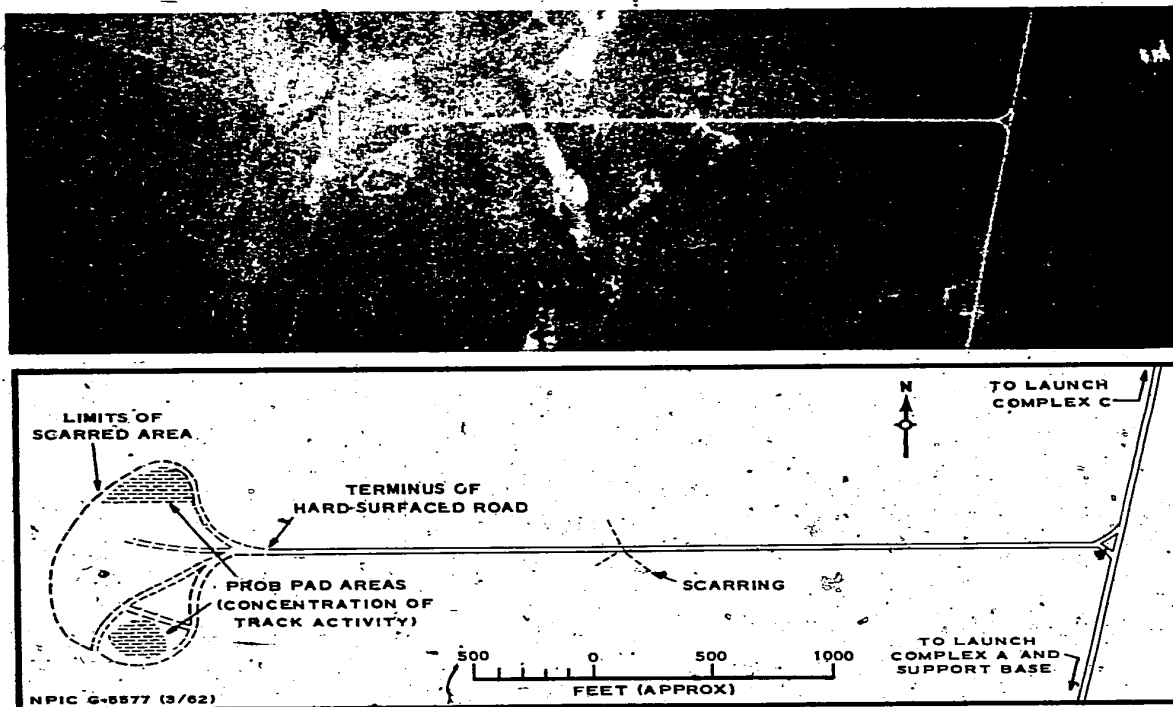


FIGURE 4. LAUNCH COMPLEX B

25X1D

.5 nm behind it. This arrangement was undoubtedly used for several SSM systems at the KYMTC up until late [REDACTED]. The same procedure is evidenced at Launch Complex A of the SCTMC. The SSM Assembly and Checkout Area is used for assembly, and the complex has its own final checkout building near the launch pads.

25X1D

Launch Complex B

This launch complex (Figure 4) is 1.5 nm north of Complex A, is in the early stage of construction. The only complete item in the complex is the access road leading to the launch area from the main access road. This road is parallel to the access road at Complex A. The concentration of

TOP SECRET CHESS RUFF

TOP SECRET CHESS RUFF

NPIC/R-36/62

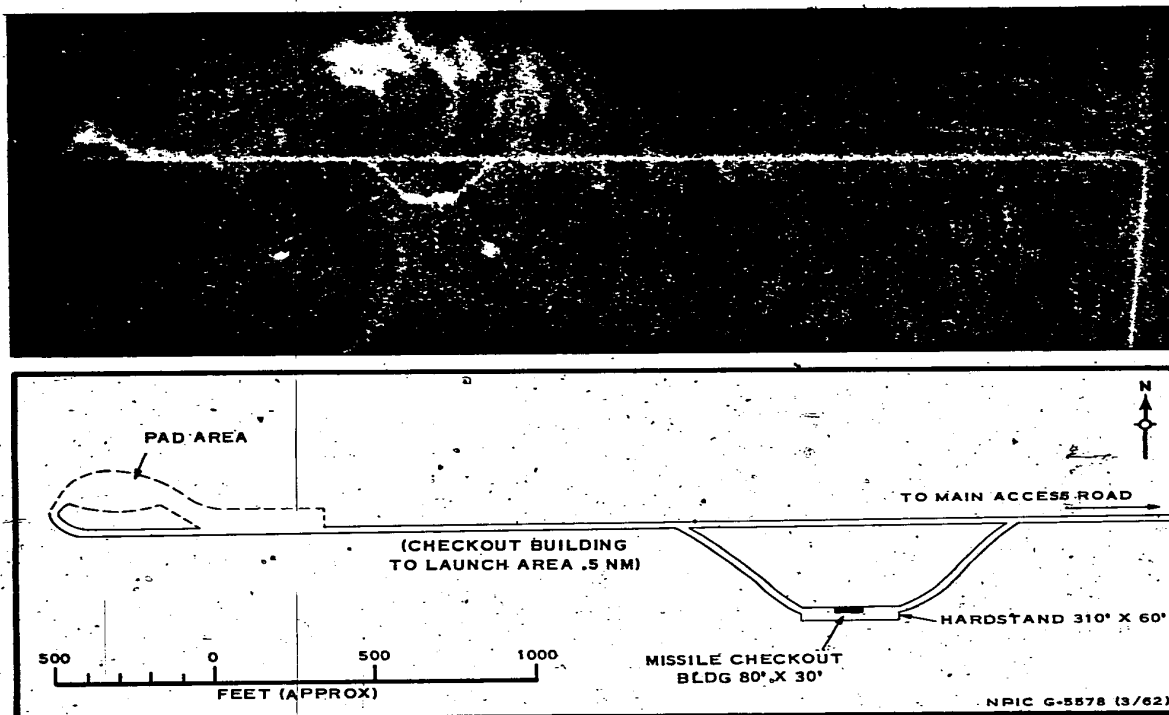


FIGURE 5. LAUNCH COMPLEX C

25X1D

track activity, as shown on Figure 4, indicates that the complex will have two launch sites when it is completed. The launch pads will probably be the same in size and configuration as those at Complex A.

Launch Complex C

This launch complex (Figure 5), approximately 4.5 nm and 3.2 nm north of Complexes A and B, respectively, appears to be in the final stages of construction. When completed, it will have one launch site, but different in configuration from the launch sites of Complexes A and B. Although no launch pad or control bunker has been identified, the probable configurations of these and of the road network are unlike those of the

TOP SECRET CHESS RUFF

TOP SECRET CHESS RUFF

NPIC/R-36/62

other complexes at the SCTMC or of any at the KYMTC. The Missile Checkout Area, however, is similar to that at Complex A of the SCTMC. The checkout building is situated on a hardstand which measures 310 by 60 feet. The 2,400-square-foot area covered by the building, which measures 80 by 30 feet, is exactly half that of the checkout building at Complex A.

SSM Instrumentation

At least five SSM rangehead instrumentation sites (Figure 2) have been identified on the photography. Although no details of the individual sites can be discerned, in general features, location, and pattern these sites are similar to those at the KYMTC. These instrumentation sites could support all three launch complexes.

SSM Housing and Support Area

The SSM Housing and Support Area (Figure 6) is one nm east of the main access road which serves the three SSM launch complexes, and 3, 6.5, and 11.5 nm by road from Complexes A, B, and C, respectively. No security is apparent. The area is divided into two distinct road-served sections: a Vehicle Maintenance and Storage Section and a Housing Section.

The Vehicle Maintenance and Storage Section contains three buildings located around a hardstand. Two of the buildings, rectangular in shape, measure 160 by 50 feet and are probably garages for vehicles and ground support/handling equipment. The third building (160 by 100 feet) is probably a maintenance and repair shop for the vehicles and equipment used at the missile checkout and launch areas.

The Housing Section, probably used by support personnel for the SSM launch facilities, contains 12 barracks-type buildings ranging from approximately 100 by 40 feet to 150 by 50 feet. This section is not served by wide-radius-turn roads, as is the Vehicle Maintenance and Storage Section. The

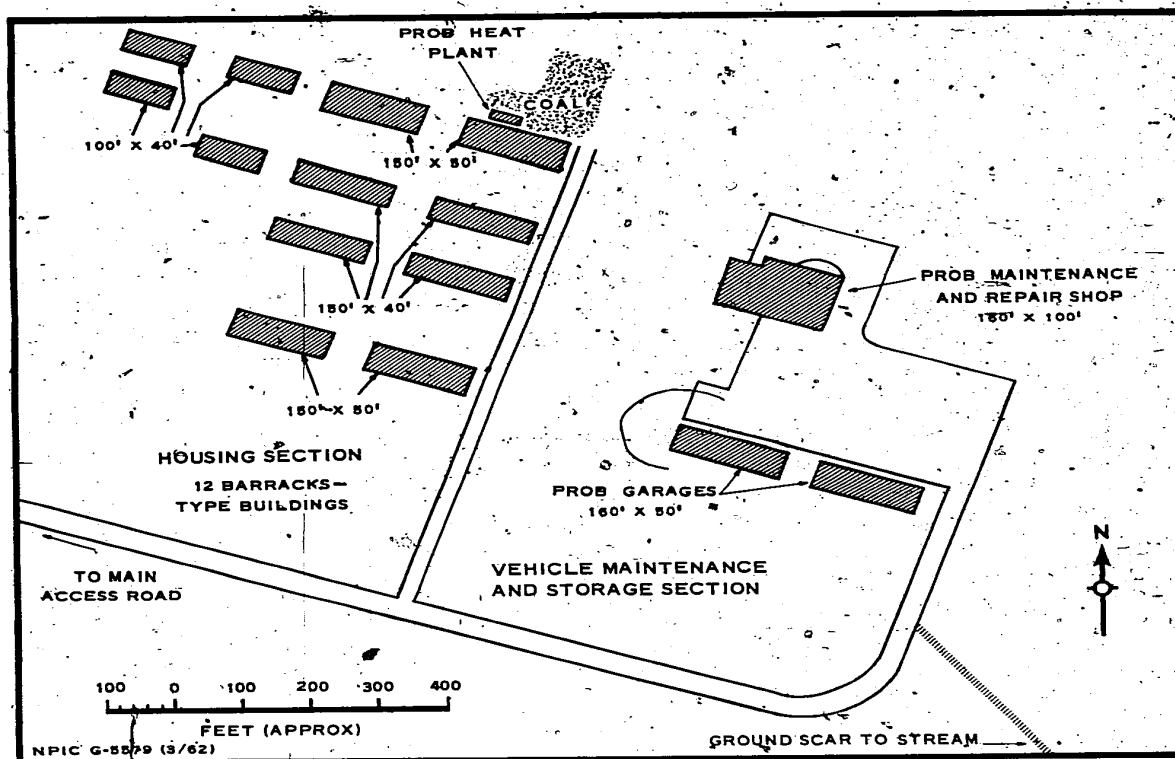


FIGURE 6. SSM HOUSING AND SUPPORT AREA.

section also contains a probable heat plant and coal pile (indicated by an irregular black image) which would provide heat for both sections.

SAM LAUNCH COMPLEX

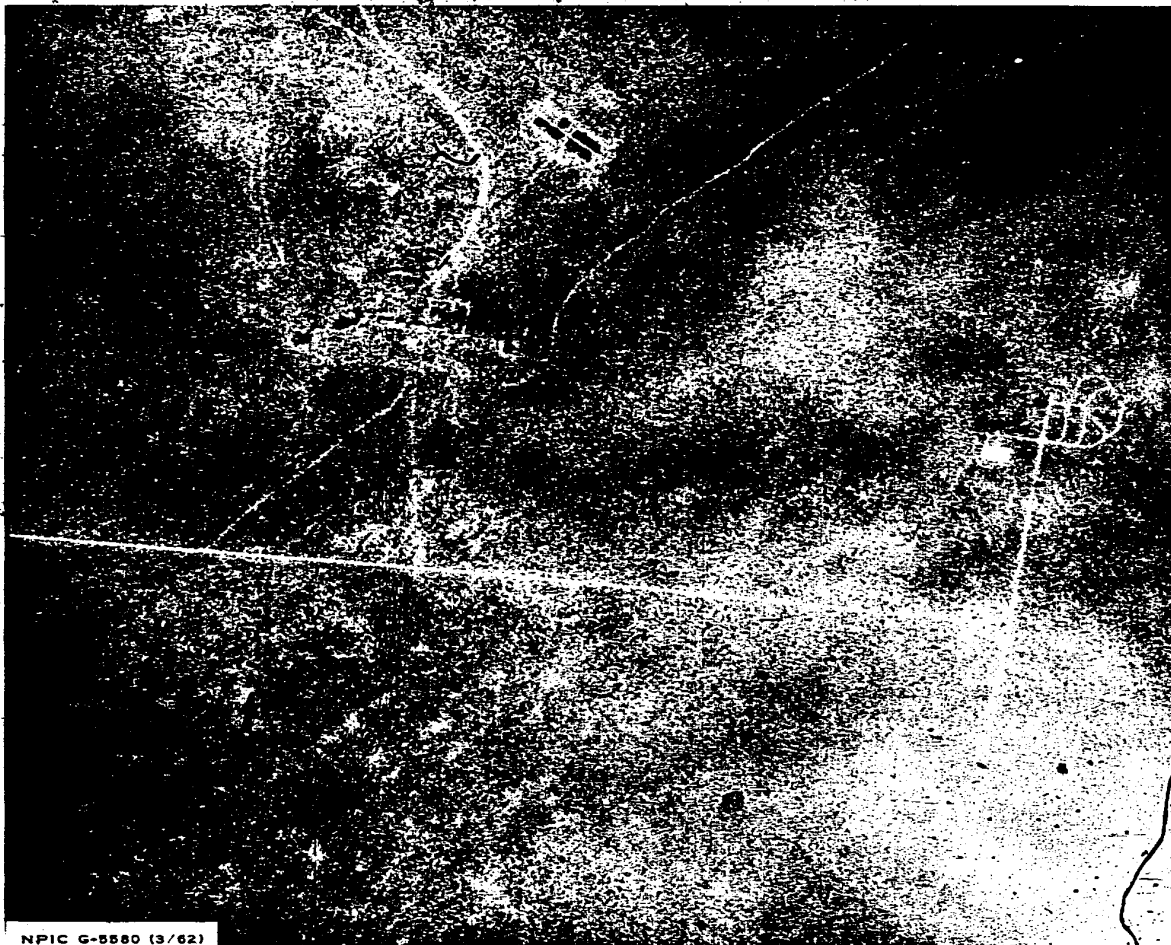
The SAM Launch Complex is composed of two fan-shaped SA-2 SAM launch areas (labeled A and B), an instrumentation network, and a Housing and Support Area (Figures 7 and 8). The complex appears to be completed.

Launch Areas

The launch areas are 10 nm by road from the SSM-SAM Assembly and Checkout Complex and are oriented to the east on an azimuth of about 90°.

TOP SECRET CHESS RUFF

NPIC/R-36/62



NPIC G-5580 (3/62)

25X1D

FIGURE 7. SAM LAUNCH COMPLEX

degrees. They appear similar except that the guidance revetment at Area B has a rectangular building in it, whereas this revetment at Area A has none. The areas are similar in configuration to the two SA-2 Practice (Live) Firing Sites at the KYMTC 2/ but are different in the following respects:

- 12 -

TOP SECRET CHESS RUFF

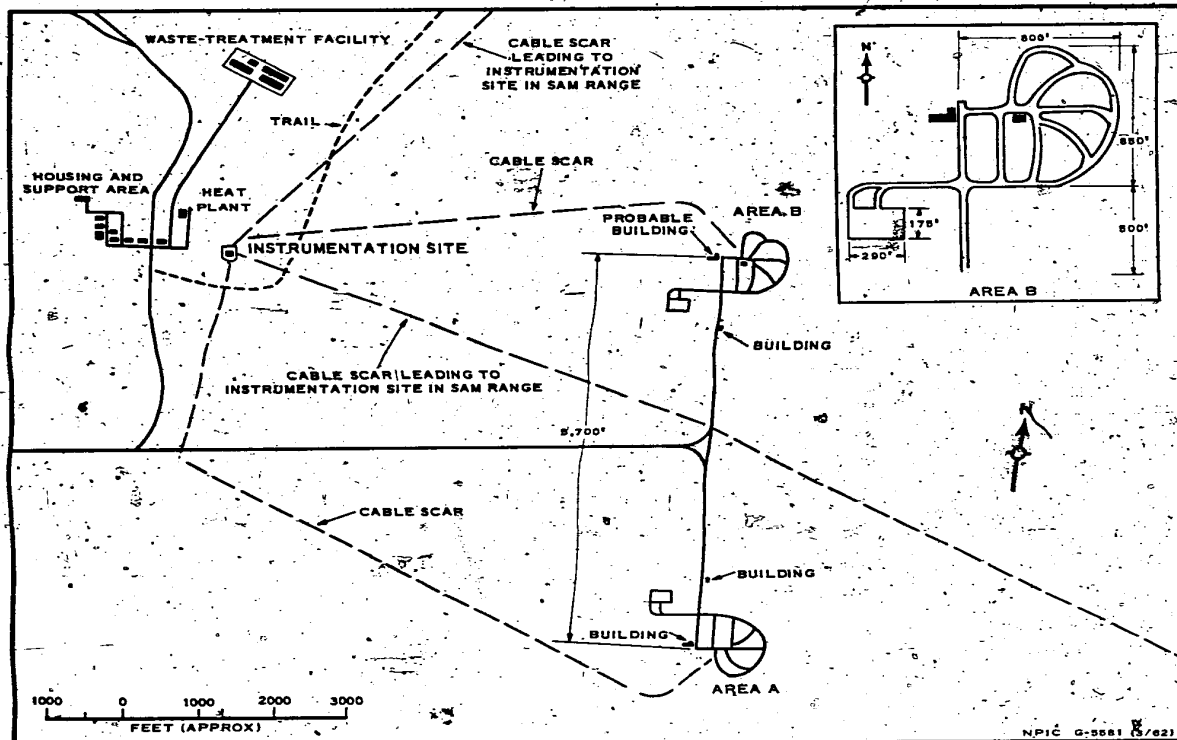


FIGURE 8. FACILITIES IN SAM LAUNCH COMPLEX.

1. The distance between launch areas (center to center) is much greater -- approximately 5,700 feet, against approximately 1,300 feet at the KYMTC sites.
2. No adjacent launch training sites are visible at the SCTMC.
3. The hardstands behind the launch areas are dual-road-served and differ in configuration and location from the hardstands at the KYMTC sites.
4. The L-shaped buildings behind the launch areas have no similarly shaped counterparts at the KYMTC sites.

TOP SECRET CHESS RUFF

NPIC/R-36/62

SAM Instrumentation

Five sites providing instrumentation for the SAM Launch Complex have been identified. The instrumentation pattern, which is centered on Launch Area B, is similar to that at the KYMTC 2/ except for spacing between sites, which is greater at the SCTMC. Site separation at the SCTMC is approximately 6 nm for the two sites closer to the launch areas and approximately 8 nm for the two sites farther east. One possible explanation for the greater distance between the SCTMC sites is that whereas the instrumentation at the KYMTC was originally set up for the SA-1 missile system, the increased capabilities of the SA-2 system made it desirable at the SCTMC to spread out the instrumentation pattern. The fifth instrumentation site, located near the SAM Housing and Support Area, may be the range instrumentation control center. No details of the individual sites can be given, but patterns and cable scars are similar to those of SAM instrumentation sites at the KYMTC.

SAM Housing and Support Area

The SAM Housing and Support Area, approximately one nm west of the launch areas, includes nine buildings and a probable central heating facility with an adjacent coal pile. Approximately 2,600 feet to the northeast is a waste-treatment facility.

MISSILE SUPPORT FACILITIES

The missile support facilities, all situated along the main access road between the Main Support Base and the SSM launch facilities, include the Operational Support Area, the SSM-SAM Assembly and Checkout Complex, the Solid Propellant Storage Area, and the Revetted Storage and Handling Area. All are road and rail served except the Revetted Storage and Handling Area, which is only road served. Portions of these facilities are similar to known Soviet missile support facilities.

TOP SECRET CHESS RUFF

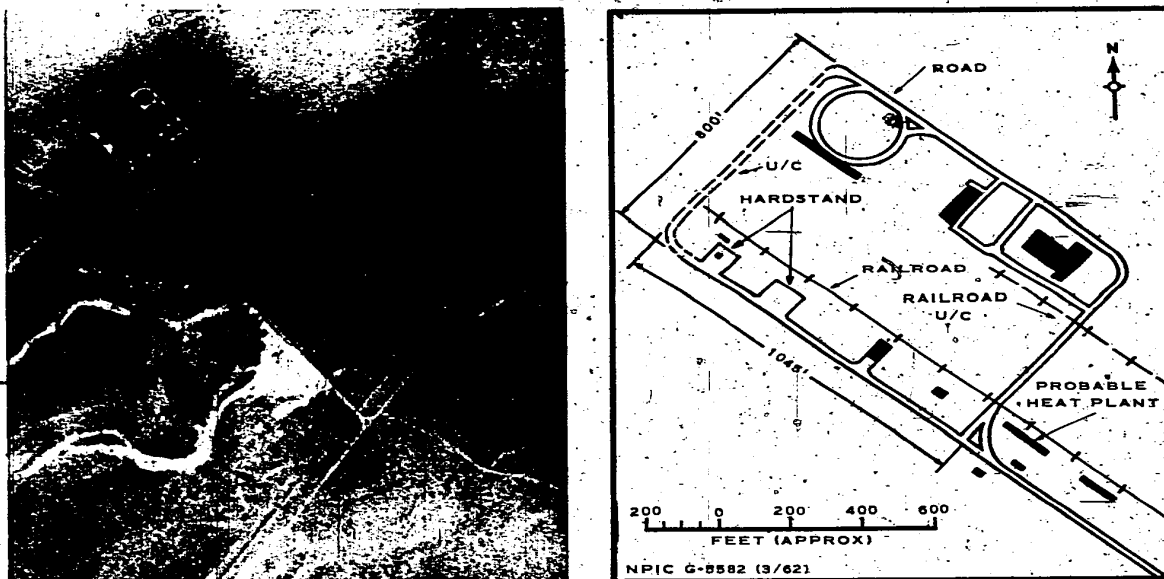


FIGURE 9. OPERATIONAL SUPPORT AREA

25X1D

Operational Support Area

This area (Figure 9) is 3.5 nm north of the Main Support Base and 4 nm south of the SSM-SAM Assembly and Checkout Complex. No security fencing is discernible, but cloud shadow and lack of contrast hinder detailed interpretation. Because of these conditions, the dimensions expressed are only approximate. A rail spur off the branch line divides into two spurs before entering the area. In addition, a good wide-radius-turn loop road system serves the area.

At least six buildings of various sizes and configurations are located within the area enclosed by the loop road. Each building is served by a good road or hardstand off the loop road. A probable heat plant is near the entrance to the area, adjacent to one of the rail spurs. Approximately 600 feet west of the area unidentified earthwork is visible.

TOP SECRET CHESS RUFF

NPIC/R-36/62

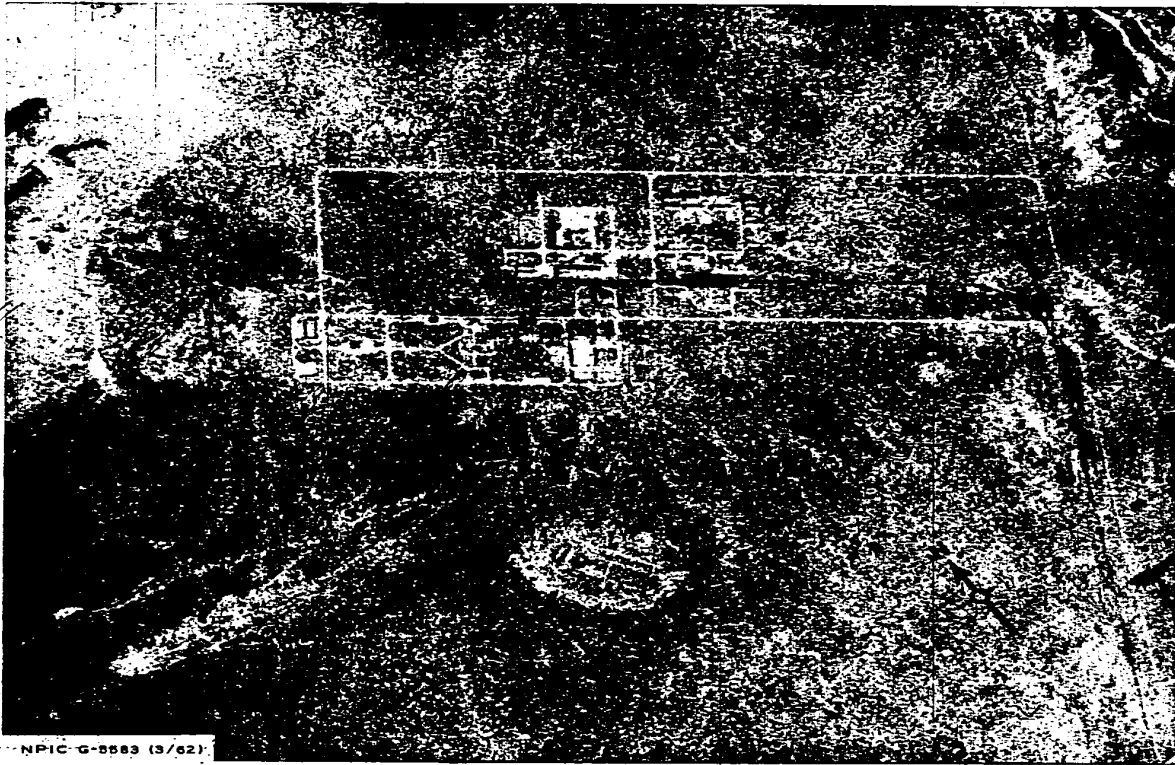


FIGURE 10. SSM-SAM ASSEMBLY AND CHECKOUT COMPLEX.

25X1D

SSM-SAM Assembly and Checkout Complex

The SSM-SAM Assembly and Checkout Complex (Figures 10 and 11) is 8 nm north of the Main Support Base and is both road and rail served. The complex is divided into two separate areas by a rail spur which also serves a central heating plant. This physical division also denotes a division by function, with one area being for SSM assembly and checkout and the other for SAM assembly and checkout. Ample room for expansion of both areas is available.

- 16 -

TOP SECRET CHESS RUFF

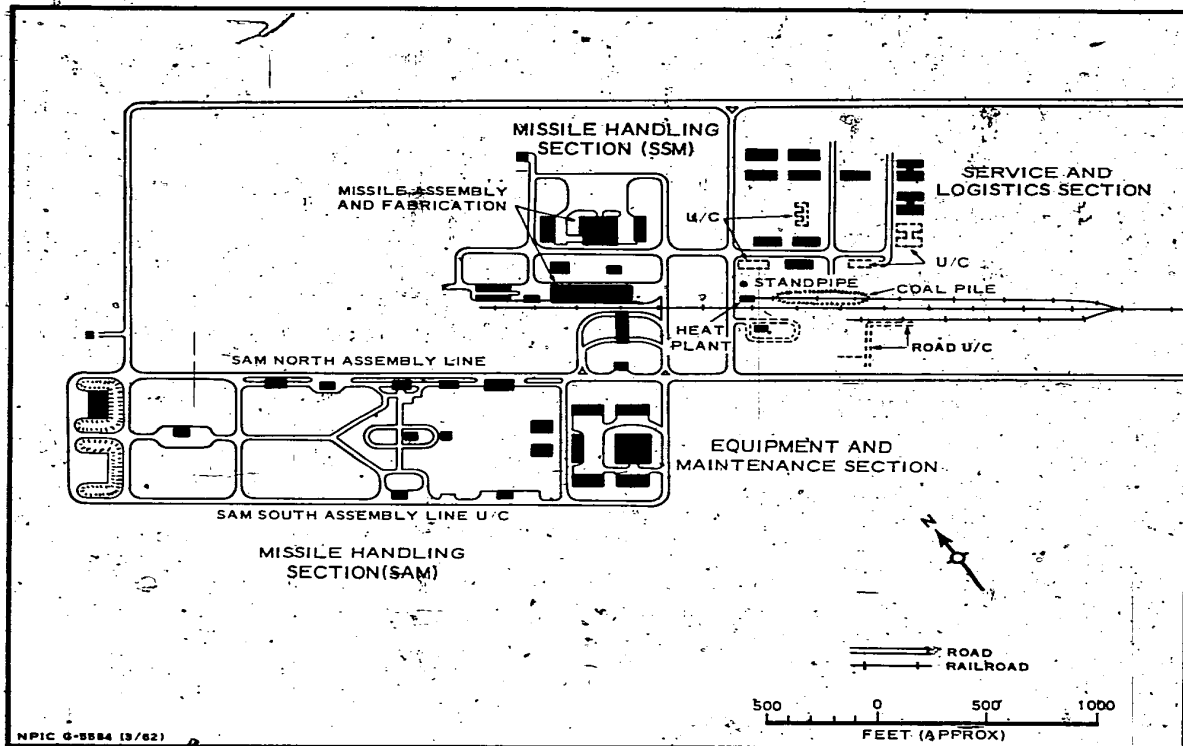


FIGURE 11. FACILITIES IN SSM-SAM ASSEMBLY AND CHECKOUT COMPLEX.

SSM Assembly and Checkout Area

The SSM Assembly and Checkout Area is divided into two sections: the Service and Logistics Section and the Missile-Handling Section. In the Missile-Handling Section missiles and missile components are trans-loaded, assembled or fabricated, and initially checked out. Cold-flow testing and maintenance of ground handling equipment may also be done in this section. Facilities in the section, particularly the large rail-served building, are reminiscent of those in the Test and Support Complex of the KYMTC. However, the large building, although nearly identical in size,

TOP SECRET CHESS RUFF

NPIC/R-36/62

does not have a probable hydrostatic tower at one end as does the comparable building at the KYMTC. Expansion of the section to the west appears to be planned.

The total area of all the buildings in the Missile-Handling Section is approximately 72,000 square feet; the total area at the Test and Support Complex at the KYMTC is 72,200 square feet.

The Service and Logistics Section contains a heat plant, water standpipe, ten completed buildings, and four buildings under construction. There is also ample room in this section for expansion. The section probably has laboratories for checkout of component parts of systems, as well as administrative and logistical facilities. Also, the existence of classroom and billeting facilities cannot be discounted. The comparable KYMTC facilities at the Test and Support Complex consist of 2 assembly and test buildings, a steam plant, 6 buildings probably used for the maintenance and storage of ground handling equipment, and 4 small supporting buildings. Also, a rail-served static test stand is located near this complex at the KYMTC.

The SSM Assembly and Checkout Area probably fulfills all the fabrication and assembly needs of the SSM facilities at present. Similarly, all the fabrication and assembly at the KYMTC were done at the Test and Support Complex until the construction of the missile assembly buildings at Launch Area 2C and Complex E in [REDACTED]

25X1D

SAM Assembly and Checkout Area

25X6 25X6

The SAM Assembly and Checkout Area, composed of a Missile-Handling Section and an Equipment and Maintenance Section, is similar in functional design to two SAM support facilities in [REDACTED]

[REDACTED] 4/ and to the SAM storage site at Istra, USSR. 5/ The area has two assembly lines, labeled north and south. The north line appears complete and the south line is either under construction or is designed for expansion. The Equipment and Maintenance Section has six

TOP SECRET CHESS RUFF

TOP SECRET CHESS RUFF

NPIC/R-36/62

buildings with a total floor space of approximately 75,750 square feet. It is presumed that missile transporters, launchers, prime-movers, and trailers are garaged and maintained in this section, which probably also includes workshops and small machine shops. The Missile-Handling Section has approximately 15 buildings (many cannot be measured accurately) where missile components are stored, assembled, and checked out before delivery to the SAM Launch Complex.

Solid-Propellant Storage Area

The Solid-Propellant Storage Area (Figures 12 and 13), both road and rail served, is approximately 2 nm by road north of the SSM-SAM Assembly and Checkout Complex. The area contains six revetted storage buildings of various sizes and a seventh revetment under construction. At the entrance to the area is a transloading point. The terminus of the rail spur cannot be determined. This area is similar to the probable booster storage area at the Istra-type SAM storage sites in the USSR. 5/

Revetted Storage and Handling Area

25X1D The Revetted Storage and Handling Area (Figures 12 and 14) appeared generally complete in [REDACTED]. The area, which is road served only, is approximately 2 nm by road north of the SSM-SAM Assembly and Checkout Complex. It appears similar to the Missile Checkout and Propellant Storage Area at the SAM Launch Complex of the KYMTC, 2/ and, therefore, propellants may be stored in it. The area contains a 100-foot-square handling building on a 270- by 150-foot hardstand, six revetted storage buildings of various sizes, and two probable revetments under construction. The variety in the size of the revetted buildings suggests that other types of explosive components may be stored in one or more of them. A central heat plant and coal pile are along the north side of the access road into the area. No security fencing can be discerned.

TOP SECRET CHESS RUFF

TOP SECRET CHESS RUFF

NPIC/R-36/62

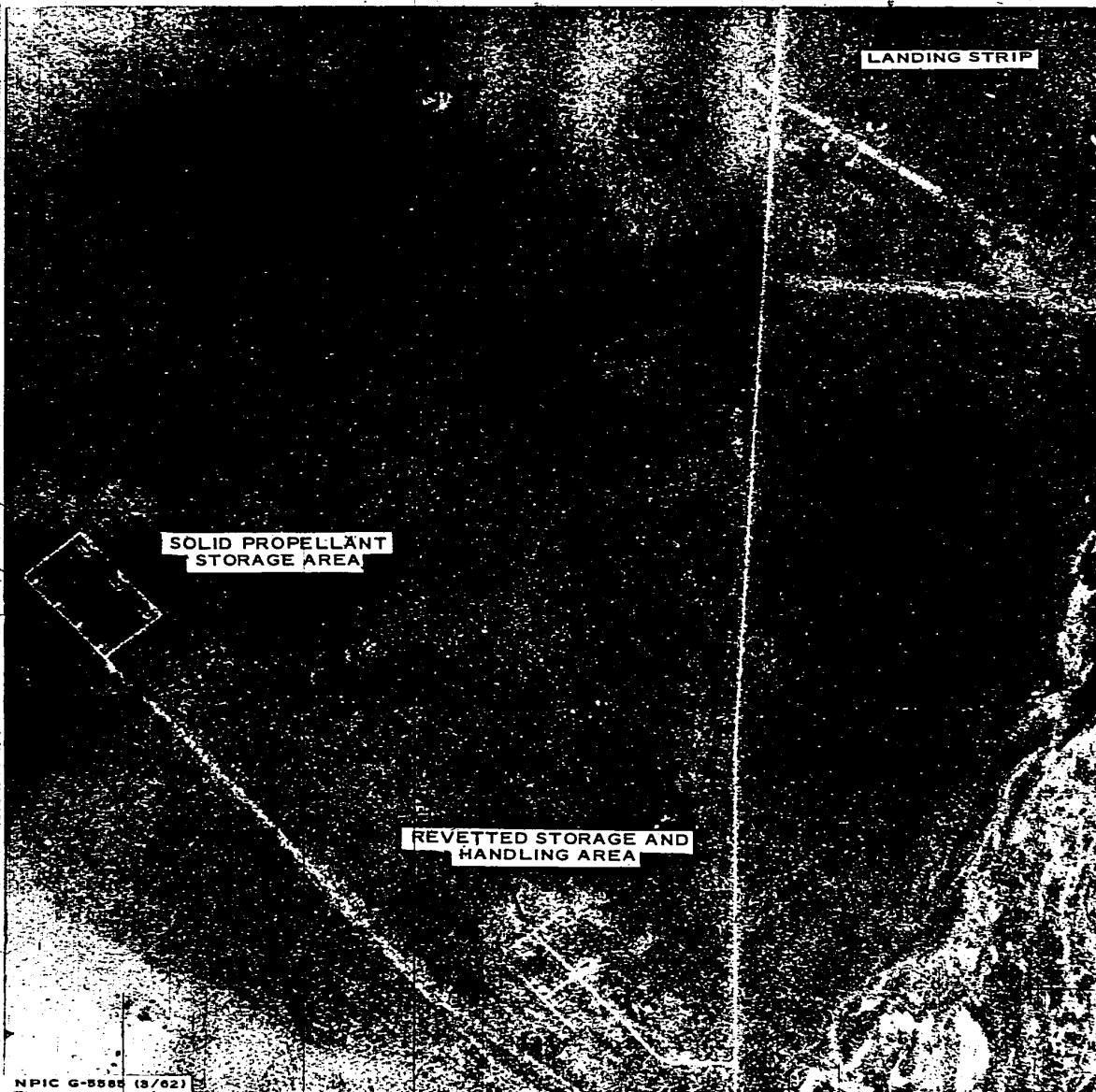


FIGURE 12. SOLID PROPELLANT STORAGE AREA, REVETTED STORAGE AND HANDLING AREA, AND NEARBY LANDING STRIP.

- 20 -

TOP SECRET CHESS RUFF

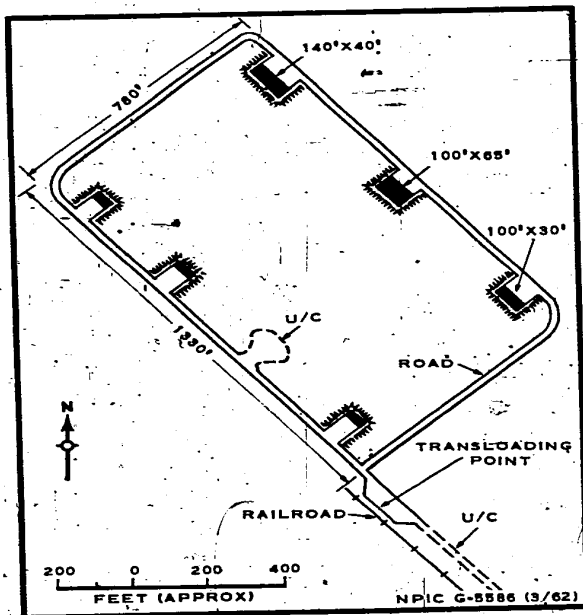


FIGURE 13. SOLID PROPELLANT STORAGE AREA.

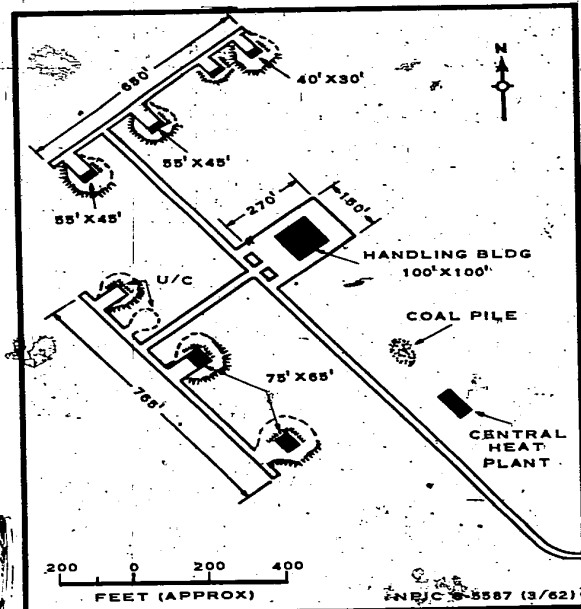


FIGURE 14. REVETTED STORAGE AND HANDLING AREA.

ADMINISTRATIVE AND LOGISTICAL SUPPORT FACILITIES

The administrative and logistical support facilities include the Main Support Base, a thermal power plant, a barracks area, two natural-surface landing strips, and an airfield complex with an M-type storage site.

Main Support Base

The Main Support Base (Figures 15 and 16) contains the major portion of the administrative and logistical support facilities for the SCTMC. The base is rail and road served and contains a Housing Area, an Administration Area, and a Warehouse Area. Ground scarring and probable construction material storage indicate that some construction was underway at the time

TOP SECRET CHESS RUFF

NPIC/R-36/62



NPIC G-5588 (3/62)

FIGURE 15. MAIN SUPPORT BASE

- 22 -

25X1D

TOP SECRET CHESS RUFF

TOP SECRET CHESS RUFF

NPIC/R-36/62

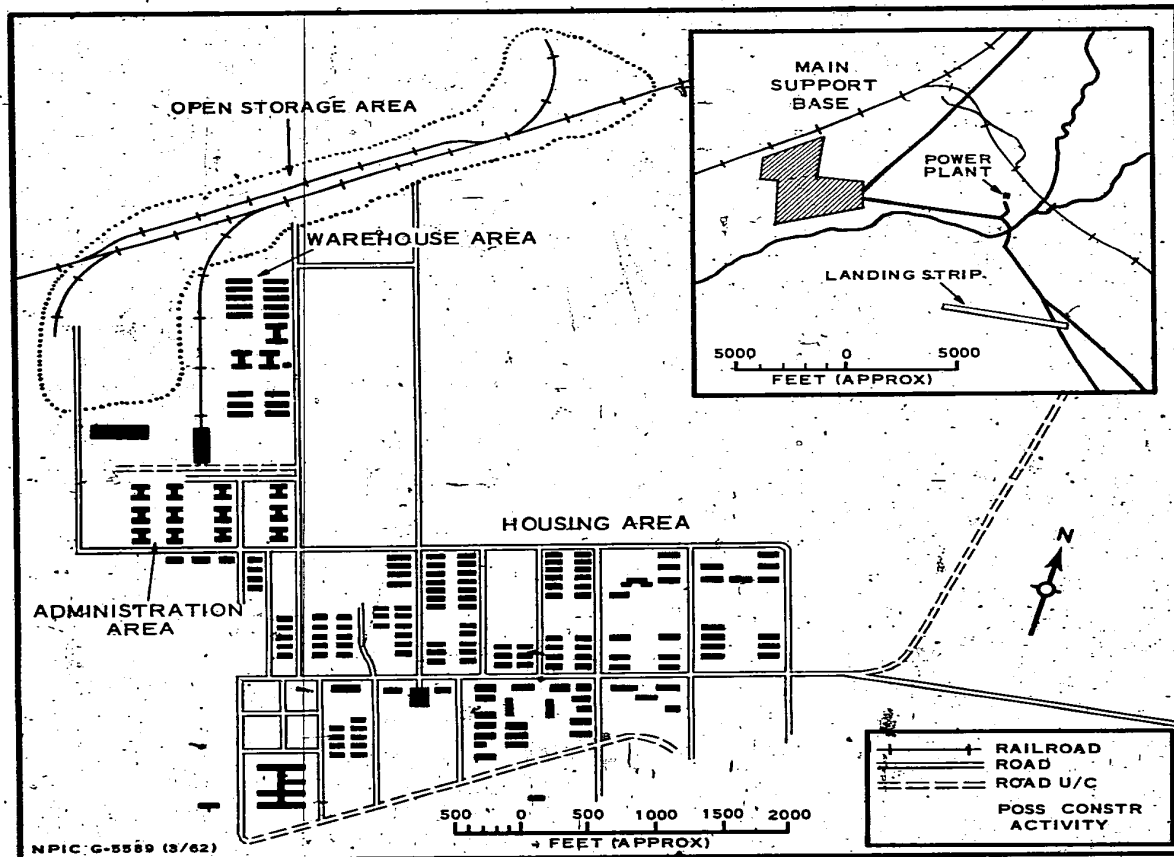


FIGURE 16. FACILITIES IN MAIN SUPPORT BASE.

Table 1. Data on Buildings in Main Support Base

UNIT	No of Bldgs	Sq Ft in Each Bldg*	Total Sq Ft
Housing Area	146	6,800	992,500
Administration Area	12**	3,300	39,600
Warehouse Area			343,600
Storage bldgs	16	16,450	
Admin-type bldgs	3**	3,300	
Handling bldg	1	44,000	
Handling bldg	1	26,500	

*If all buildings are single story.
 **H-shaped buildings.

TOP SECRET CHESS RUFF

TOP SECRET CHESS RUFF

NPIC/R-36/62

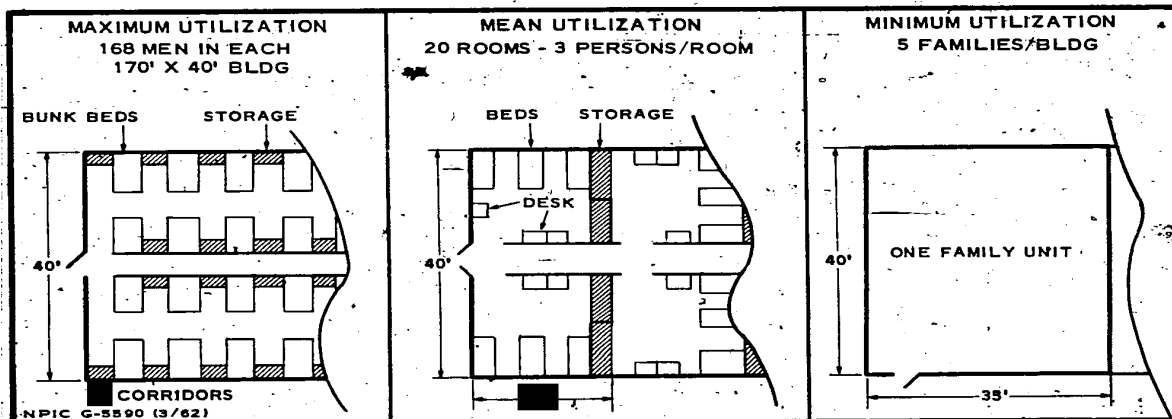


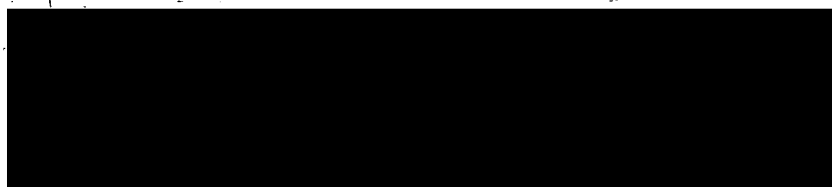
FIGURE 17. SKETCHES ILLUSTRATING FORMULAS FOR HOUSING-SPACE UTILIZATION.

25X1D

of the photography. No satisfactory explanation has been found for the apparently excessive size of the base other than that it may have been constructed in anticipation of expansion of the center.

As shown in Table 1, the Housing Area contains 146 buildings with a total of approximately 992,500 square feet of floor space. It is estimated that this area accommodates approximately 9,700 persons, including 205 with dependent families. This estimate is purely hypothetical and is based on a number of assumptions regarding space utilization in this area. These assumptions formed the basis for three formulas devised to determine a maximum, minimum, and mean utilization of the buildings (Figure 17). Since all three formulas are probably represented at this installation, all have been utilized in reaching this estimate. Formula details follow.

25X1B



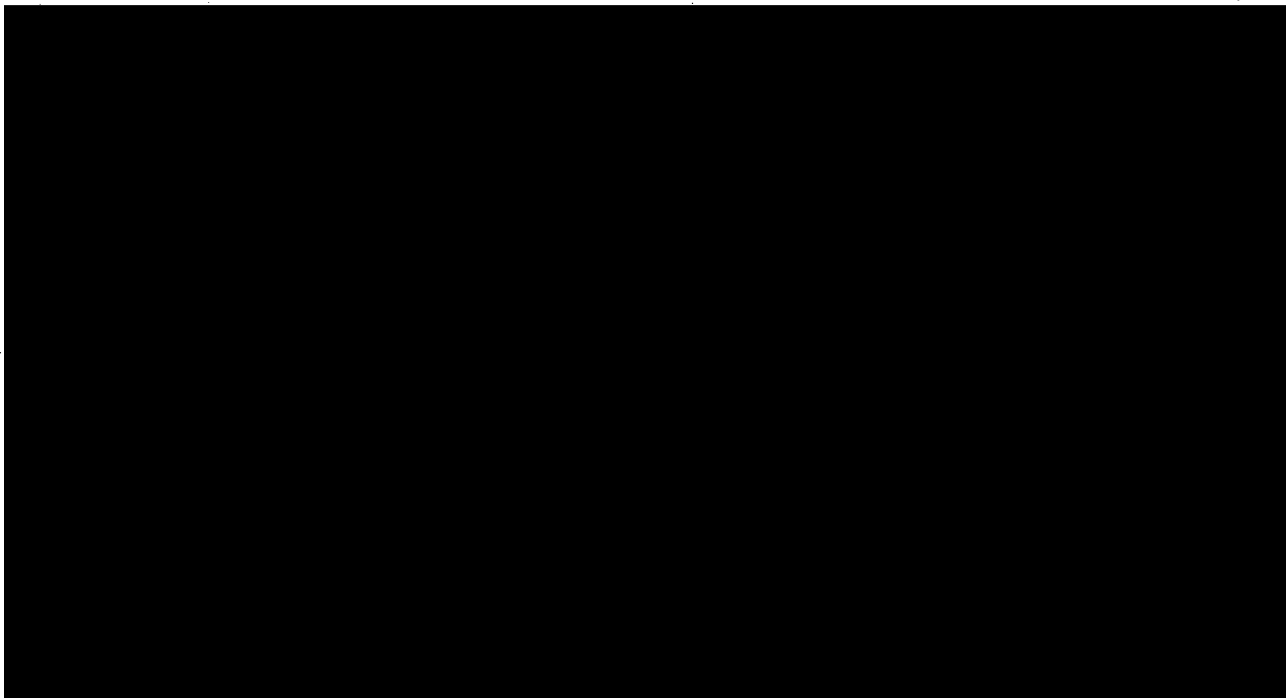
TOP SECRET CHESS RUFF

25X1B

Approved For Release 2000/05/11 : CIA-RDP78T05439A000200090001-3

Approved For Release 2000/05/11 : CIA-RDP78T05439A000200090001-3

NPIC/R-36/62

Thermal Power Plant

The thermal power plant, with an adjacent coal pile and two possible cooling towers, is 1.5 nm east of the Main Support Base and is both road and rail served. No power traces from this plant have been identified.

Barracks Area

This area, located approximately 9 nm north-northeast of the Main Support Base and just north of the SAM access road (Figure 18), has approximately 70 buildings with a total square footage of approximately 130,000. If all buildings are single story and 25 percent of the total square footage is devoted to support, the area can accommodate approximately 2,500 men.

The location of this area (Figure 2) suggests that it was constructed for the billeting of troops. Two secondary roads serve the area. One connects to the main road and the other to the SAM Launch Complex access road. It is approximately 8 nm from this area to the SAM launch areas, approximately 14 nm to SSM Launch Complex A, and approximately 4 nm to the SSM-SAM Assembly and Checkout Complex.

Natural-Surface Landing Strips

The two natural-surface landing strips are located near the SCTMC support facilities. One strip (Figures 2 and 16) with a 7,600-foot east-west runway, is 1.5 nm south-east of the Main Support Base. It has no visible support facilities and appears to be seldom used. The other landing strip (Figures 2 and 12), with a length of approximately 4,200 feet (including 2,500 feet of prepared surface), is 11 nm north of the Main Support Base and 7 nm south of SSM Launch Complex A. The main road cuts through the western end of the runway, but ample runway length remains. Associated with the strip is a road-served unidentified area with at least one major building.

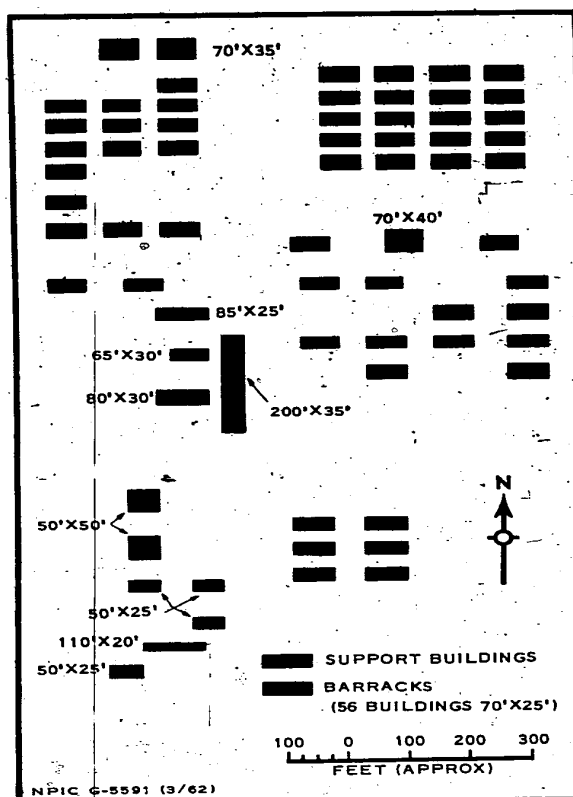


FIGURE 18. BARRACKS AREA.

TOP SECRET CHESH RUFF

NPIC/R-36/62

25X1A

Shuang-ch'eng-tzu Area Airfield Complex [REDACTED]

The airfield near Shuang-ch'eng-tzu (Figure 19), located at 40-17N 99-46E, approximately 40 nm south-southeast of the Main Support Base, is the only major airfield in the area of the SCTMC. The rail line, which serves both the airfield and the missile center, provides the only good ground transportation between the two.

25X1D [REDACTED] The airfield and an adjacent portion of the rail line were visible on [REDACTED] TALENT photography, but extreme obliquity precluded interpretation of the field or a determination of whether the rail line continued to the missile center area.

With its runway of 13,575 by 270 feet (oriented northeast-southwest), the airfield can handle any known Sino-Soviet aircraft. Facilities observed include the following:

1. Alert aprons at each end of the runway.
2. Taxi strips, parking apron, and a service apron.
3. ILS facilities at each end of the runway.
4. A hardstand area.
5. A firing-in butt.
6. A rail offloading facility.
7. Two drive-through hangars.
8. A road- and probably rail-served POL storage area containing four circular, probably underground, storage tanks.
9. Unidentified areas.
10. A rail- and road-served M-type storage site. This site falls into the second of four groups of M-type sites. 6/

It is especially similar to the M-type site at Limanskoye Airfield, USSR. 7/ While no specific function has been definitely assigned to the M-type storage sites, they may be used to store weapons for bomber aircraft.

TOP SECRET CHESH RUFF

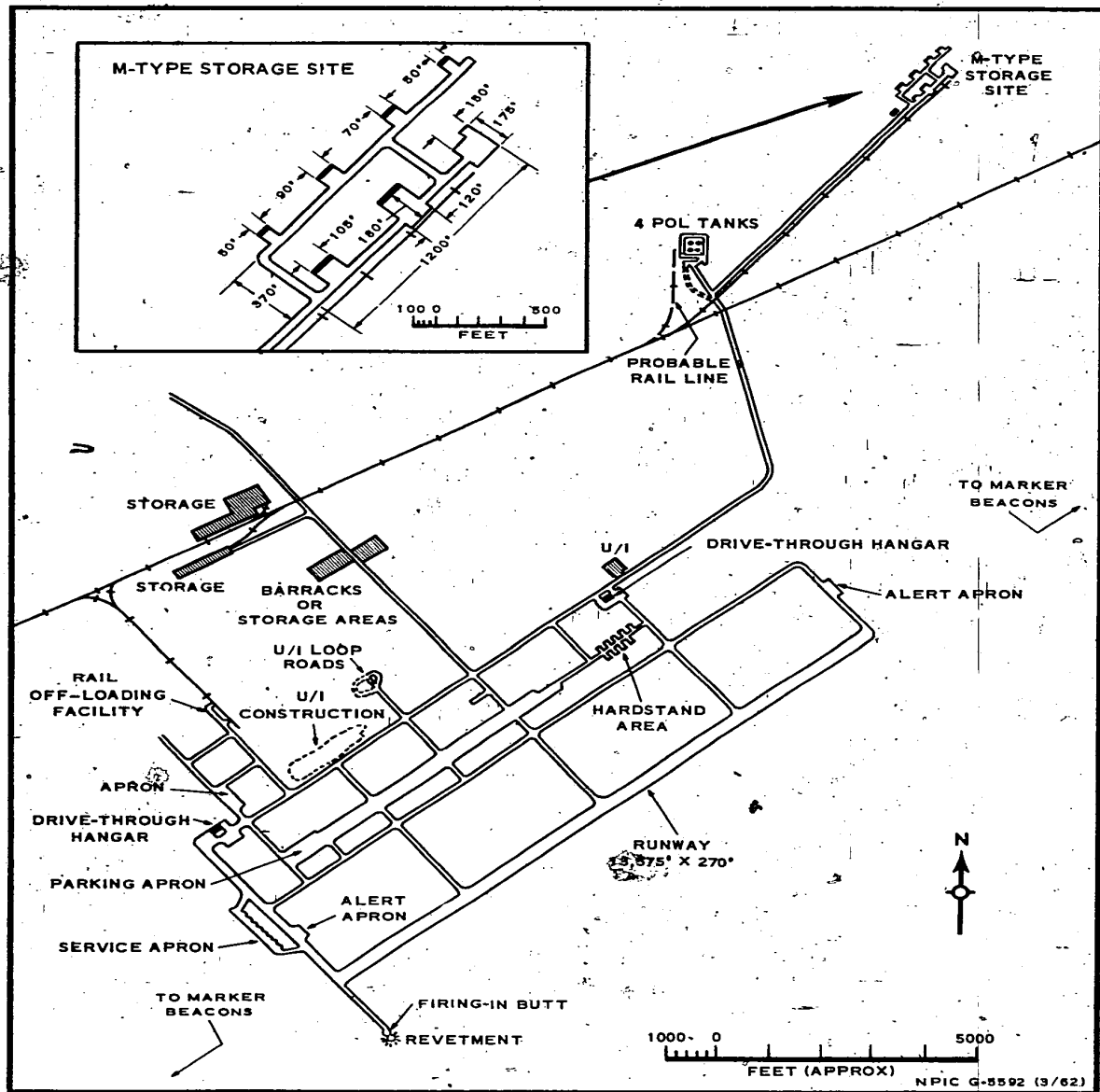


FIGURE 19. SHUANG-CH'ENG-TZU AREA AIRFIELD COMPLEX.

TOP SECRET CHESS RUFF

NPIC/R-36/62

CONCLUSIONS

By Army, Navy, and CIA PI Analysts

The SCTMC has facilities capable of SSM and SAM launchings, including testing.

Apparently the SCTMC was built with an intimate knowledge of Soviet R & D missile facilities at the KYMTC.

There was current construction activity as of [REDACTED]

25X1D

Housing space is available for a large number of personnel, possibly more than at the KYMTC.

Although SSM Launch Complexes A and B resemble a known Soviet R & D launch site, SSM Launch Complex C has a unique configuration that does not resemble that of any known R & D, training, or deployed Soviet launch site.

The types of programs (i.e., R & D, troop training, etc.) underway at the SCTMC cannot be determined from the KEYHOLE photography.

By Air Force PI Analyst

Sufficient evidence has been presented to justify a more specific set of conclusions.

First, R & D was eliminated as a function of this missile center as of the date of the photography. With one exception, all the operational areas analyzed have been determined to be of Soviet design. It is illogical to presume that the Chinese are conducting R & D on systems that the Soviets have already developed. The area not sufficiently similar to be positively identified as Soviet is SSM Launch Complex C. No Chinese-designed facilities as such have been identified, and there is no evidence to support the notion that any of the missile systems may be Chinese.

Secondly, it is concluded that at present the function of the center is primarily familiarization, and, in the SAM complex, possibly troop training

TOP SECRET CHESS RUFF

TOP SECRET CHESS RUFF

NPIC/R-36/62

as well. As used here, "familiarization" means the instruction of a Chinese cadre of scientific and technical personnel in the storing and handling of propellants, assembly and checkout of components, launch and guidance, and the monitoring by instrumentation of internal and external missile performance in flight.

It has been shown in the body of this report that the physical facilities of this center, including instrumentation, are of Soviet origin. Also, it is apparent that the procedural philosophy is Soviet. For example, the center adheres to the Soviet practice of final assembly of the missile in the launch area, rather than at the factory. Similarly, both SSM and SAM systems are present as separate entities; that is, there is no mixing of the systems. It is concluded, therefore, that in its present stage of development this center is physically and procedurally recognizable as Soviet.

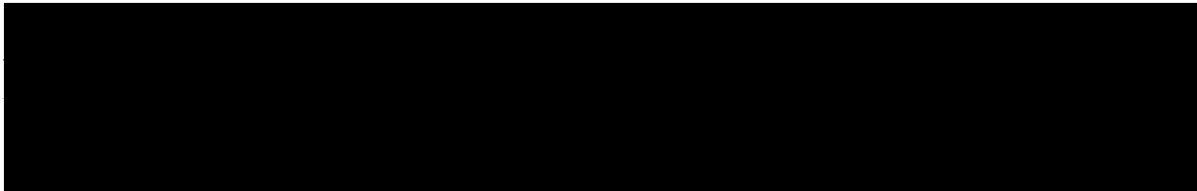
TOP SECRET CHESS RUFF

TOP SECRET CHESS RUFF

NPIC/R-36/62

REFERENCES

25X1D



DOCUMENTS

- 25X1C 1. CIA. PIC/JB-1016/60, Missile Test Center, Kapustin Yar/Vladimirovka, USSR, 1 Dec 60 (SECRET/ [REDACTED])
- 25X1C 2. CIA. PIC/JR-1008/61, Surface-to-Air Missile Facilities, Kapustin Yar/Vladimirovka Missile Test Center, USSR, Mar 61 (SECRET/ [REDACTED]) -- Downgrading Prohibited)
- 25X1C 3. CIA. PIC/JR-1005/61, Launch Complex "E", Surface-to-Surface Missile Facilities, Kapustin Yar/Vladimirovka Missile Test Center, USSR, Feb 61 (SECRET/ [REDACTED]) -- Downgrading Prohibited)
- 25X1C 4. [REDACTED]
- 25X1C 5. Air, AFIC. DPIR S 60-1, Istra Surface-to-Air Missile Storage Site, USSR, Jun 60 (TOP SECRET/TALENT CONTROL ONLY)
- 25X1C 6. NPIC. R-1001/61, M-Type Storage Sites at Soviet Airfields, Jun 61 (SECRET/ [REDACTED]) -- Downgrading Prohibited)
- 25X1C 7. CIA. RR/HTA/M-15/57, Munitions Storage Area at Dimanskoye Airfield, USSR, 17 Apr 57 (TOP SECRET CHESS)

TOP SECRET CHESS RUFF